	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	12252	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) and ((detect$3) or ("endpoint" adj detect$3)) and (wavelenghth or light or UV or ultraviolet or "white light" or visible) and (semiconductor or wafer or substrate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:33			0
2	BRS	L8	832	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) same ((detect$3) or ("endpoint" adj detect$3)) same (wavelenghth or light or UV or ultraviolet or "white light" or visible) same (semiconductor or wafer or substrate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:07			0
3	BRS	L15	364	8 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0
4	BRS	L22	50	15 and 438/$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:36			0
5	BRS	L29	34	8 and dress$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:02			0
6	BRS	L36	4	8 and ((dress$3 with (pressure or tool or type or pad)) same (polish$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:06			0
7	BRS	L43	56	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) same ((dress$3 with (pressure or tool or type or pad)) same (polish$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:21			0
8	BRS	L50	11	43 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
9	BRS	L57	56	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) same ((dress$3 with (pressure or tool or type or rock$3 or vibrat$3 or pad)) same (polish$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:22			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	12252	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) and ((detect$3) or ("endpoint" adj detect$3)) and (wavelenghth or light or UV or ultraviolet or "white light" or visible) and (semiconductor or wafer or substrate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:33			0
2	BRS	L8	832	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) same ((detect$3) or ("endpoint" adj detect$3)) same (wavelenghth or light or UV or ultraviolet or "white light" or visible) same (semiconductor or wafer or substrate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:07			0
3	BRS	L15	364	8 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0
4	BRS	L22	50	15 and 438/$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:36			0
5	BRS	L29	34	8 and dress$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:02			0
6	BRS	L36	4	8 and ((dress$3 with (pressure or tool or type or pad)) same (polish$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:06			0
7	BRS	L43	56	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) same ((dress$3 with (pressure or tool or type or pad)) same (polish$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:21			0
8	BRS	L50	11	43 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
9	BRS	L57	56	(polish$3 or cmp or ("chemical mechanical" adj polish$3)) same ((dress$3 with (pressure or tool or type or rock$3 or vibrat$3 or pad)) same (polish$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:22			0

US-PAT-NO: 4600469

DOCUMENT-IDENTIFIER: US 4600469 A

TITLE: Method for polishing detector material

---------- KWIC ---------

The rate of flow of etchant 100 over pad 12 is not critical to the success of
the method of the present invention, as long as pad 12 is kept saturated with
etchant 100. Typically, plate 10 moves at a speed to produce a surface speed
at **wafer** 24 of approximately 180 inches per minute. A relatively **light**
pressure, for example 150 to 750 grams per square inch, may be placed on
wafer
24 in order to insure contact with pad 12 and an adequate rate of material
removal. It is understood that these speeds and pressures may be varied
significantly, depending on the rate of removal desired, and the type of
material selected for pad 12 and the type of **detector** material being **polished**.
The use of the suggested pressure and plate speed, in combination with use of
a
Collussus LP-57 pad and 1:1 solution of etchant 100, results in a removal rate
of approximately one (1) micron per minute.

US-PAT-NO: 5846882

DOCUMENT-IDENTIFIER: US 5846882 A

TITLE: Endpoint detector for a chemical mechanical polishing system

---------- KWIC ---------

The methods of the first type typically require access to at least a portion of
the **substrate** surface being **polished,** such as by sliding a portion of the
substrate over the edge of the **polishing** pad, and simultaneously analyzing the
exposed portion of the **substrate**. For example, where **polishing** is used to
expose metal lines embedded in a dielectric layer, the overall or composite
reflectivity of the surface being **polished** changes as the lines are exposed.
By monitoring the reflectivity of the **polished** surface or the wavelength of
light reflected from the surface, the exposure of the lines through the
dielectric layer, and thus the **polishing** endpoint, can be **detected**. However,
this method does not provide a way of determining the **polishing** endpoint
unless
an underlying layer is exposed during **polishing**. Additionally, it is somewhat
erratic in predicting the **polishing** endpoint unless all of the underlying lines
are simultaneously exposed. Furthermore, the **detection** apparatus is delicate
and subject to frequent breakdown caused by the exposure of the measuring or
detecting apparatus to the slurry.